

REMARKS

Favorable reconsideration of this application is respectfully requested.

Claims 1-17 remain pending in this application; claims 2 and 11 have been amended herein.

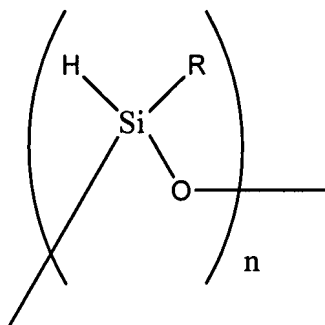
In the Office Action mailed January 3, 2007, the Examiner objected to the specification because of the presence of a typographical error at page 16; the specification has been amended herein to correct such error.

Claims 1-12 were rejected under 35 U.S.C. §112, first paragraph, for possessing subject matter not described in the specification in a way to enable one skilled in the art to make and/or use the invention. Specifically, the Examiner has noted that both claims 2 and 11 both cite a hydrocyclopentasiloxane and a cyclopentasiloxane, as well as both a hydrocyclohexasiloxane and a cyclohexasiloxane. According to the Examiner, it is not clear whether or not different compounds are met. The Examiner also notes hexa compounds are substituted at both positions 6 and 7. Claims 2 and 11 have been amended for clarification and withdrawal of this rejection is respectfully requested.

The Examiner has also rejected claims 2, 7, 11 and 16 under 35 U.S.C. §112, second paragraph, as being indefinite. Specifically, claims 2 and 11 are rejected for citing both a hydrocyclopentasiloxane and a cyclopentasiloxane, as well as both a hydrocyclohexasiloxane and a cyclohexasiloxane. According to the Examiner, it is not clear whether or not different compounds are met. Additionally, the Examiner notes hexa compounds are substituted at both positions 6 and 7. Claims 2 and 11 have been amended for clarification and withdrawal of this rejection is respectfully requested.

With respect to claims 7 and 16, the Examiner asserts it is unclear how an alkylene group can be about 2 to about 3 carbon atoms. However, as recently acknowledged by the Federal Circuit: "The use of the word "about," avoids a strict numerical boundary to the specified parameter." See, *Ortho-McNeil Pharm., Inc. v. Caraco Pharm. Labs., Ltd.*, 06-1102 (Fed. Cir. January 19, 2007) (quoting *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1217 (Fed. Cir. 1995)). Thus, contrary to the Examiner's assertions, it is respectfully submitted that the use of the term "about" does not, in fact, render claims 7 and 16 indefinite and reconsideration of this rejection is respectfully requested.

The Examiner has rejected claims 1-3, 5-12, and 14-17 under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 6,613,432 to Zamora et al. ("Zamora") in view of U.S. Patent No. 5,383,903 to Totakura ("Totakura"). Nowhere does Zamora et al. disclose or suggest a method for improving the fray resistance of a suture having at least one filament by applying a coating to at least a portion of a surface of the at least one filament of the suture by a plasma polymerization process of a hydrocyclosiloxane monomer of the general formula



where R is an aliphatic group and n is an integer from 2 to about 10, wherein the coating improves the fray resistance of the suture as presently recited in independent claim 1. Similarly,

nowhere does Zamora disclose or suggest a method for making a suture with such a coating as recited in independent claim 10.

Moreover, nowhere is there any appreciation in Zamora of the benefits in fray resistance obtained by coating a suture with amine groups as set forth in claims 12-15 and further including a polyalkylene oxide compound in such a coating as set forth in claims 16-17. The benefits for fray-resistance obtained with such coatings are described in the specification, especially Example 1 (pages 16-19 of the specification), and data supporting such benefits are clearly set forth and summarized in Tables 1 and 2 (found at pages 18-19 of the specification).

In fact, as acknowledged by the Examiner, nowhere does Zamora disclose or suggest sutures. Thus, without disclosing sutures or the benefits obtained for fray resistance, Zamora fails to render obvious claims 1-3, 5-12, and 14-17.

Totakura fails to remedy the deficiencies of Zamora, no matter how these references may be combined. Totakura discloses coating sutures or filaments with a dimethylsiloxane-alkylene oxide copolymer. However, nowhere does Totakura disclose or suggest a method for improving the fray resistance of a suture having at least one filament by applying a coating to at least a portion of a surface of the at least one filament of the suture by a plasma polymerization process of a hydrocyclosiloxane monomer wherein the coating improves the fray resistance of the suture as recited in claim 1 or a method for making a suture with such a coating as recited in claim 10. Moreover, nowhere does Totakura disclose or suggest a coating further including an amine group that has been introduced onto the coating by plasma polymerization (as recited in claims 3 and 12), nor that a carbonate-based polyalkylene oxide may be contacted with the amine grafted polymer coating to produce a polyalkylene modified polymer coating (as recited in claims 7 and

16). In fact, nowhere in Totakura is there any teaching or suggestion of a plasma polymerization process.

In order to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim limitations. *See* MPEP §2143. The Examiner suggests, without any support, that improvement in fray resistance is inherent in the coatings disclosed by Zamora and/or Totakura. This ignores, however, that Zamora was concerned with cell adhesion and apoptosis, not fray resistance of sutures, and Totakura nowhere discloses a plasma polymerization process. The Examiner has thus taken applicants' disclosure to provide the teaching to combine the references as suggested and thus engaged in impermissible hindsight. As independent claims 1 and 10 are not rendered obvious, claims 2-3, 5-9, 11-12 and 14-17, which all depend directly or indirectly from claim 1 or claim 10 and incorporate their limitations therein, are similarly not obvious over the cited references.

Accordingly, neither Zamora nor Totakura, taken alone or in any combination, render claims 1-3, 5-12, and 14-17 obvious and reconsideration of this rejection is respectfully requested.

The Examiner has next rejected claims 4 and 13 under 35 U.S.C. §103(a) as obvious over Zamora et al. in view of Totakura and further in view of U.S. Patent No. 5,463,010 to Hu et al. ("Hu"). Reconsideration of the foregoing rejections is respectfully requested. Claim 4 depends indirectly from claim 1 and claim 13 depends indirectly from claim 10.

As noted above, nowhere does Zamora teach coating a suture, and nowhere does Zamora disclose or suggest methods for improving the fray resistance of a suture having at least one filament by applying a coating to at least a portion of a surface of the at least one filament of the suture by a plasma polymerization process of a hydrocyclosiloxane monomer wherein the coating improves the fray resistance of the suture as recited in claim 1, or a method for making a suture with such a coating as recited in claim 10. As also noted above, Totakura fails to remedy the deficiencies of Zamora.

In fact, the Examiner has admitted that neither Zamora nor Totakura disclose coating plasma polymerizing a suture with a hydrocyclosiloxane and then plasma grafting amines thereto. Thus, neither Zamora nor Totakura, taken alone or in any combination, render claims 4 and 13 obvious.

Hu fails to remedy the deficiencies of Zamora and Totakura. The Examiner asserts Hu teaches coating polypropylene fibers or other medical devices with a coating formed by plasma co-polymerization of a hydrocyclosiloxane and N-trimethylsilylallylamine. However, while Hu discloses coating microporous fibers to protect against plasma leakage and gas permeability, nowhere does Hu disclose or suggest a method for improving the fray resistance of a suture having at least one filament by applying a coating to at least a portion of a surface of the at least one filament of the suture by a plasma polymerization process of a hydrocyclosiloxane monomer wherein the coating improves the fray resistance of the suture as recited in claim 1, nor a method for making a suture with such a coating as recited in claim 10, nor the introduction of an amine group onto the coating by copolymerization of an unsaturated or cyclic amine with the hydrocyclosiloxane monomer on the surface of the filament as recited in claims 4 and 13. As

noted above, Hu is focused on plasma leakage and gas permeability, not improving the fray resistance of sutures.

There is no motivation to combine Hu, Zamora and/or Totakura as suggested by the Examiner; to do so requires the use of impermissible hindsight. Thus none of the references, taken alone or in any combination, fail to describe all of the limitations of claims 4 and 13 and do not render claims 4 and 13 obvious.

It is believed that the pending claims of the application, i.e., claims 1-8, are patentably distinct over the art of record and are in condition for allowance. In the event that the Examiner believes that a telephone conference or a personal interview may facilitate resolution of any remaining matters, the undersigned may be contacted at the number indicated below. Early and favorable reconsideration of this application is respectfully requested.

Respectfully submitted,



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